CHAPTER 85 – FLOODPLAIN MANAGEMENT ORDINANCE

85.01 DEFINITIONS.

Unless specifically defined below, words or phrases used in this Ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this Ordinance its most reasonable application.

1. APPURTENANT STRUCTURE – A structure which is on the same parcel of the property as the principal structure to be insured and the use of which is incidental to the use of the principal structure

2. BASE FLOOD - The flood having one (1) percent chance of being equaled or exceeded in any given year. (Also commonly referred to as the "100-year flood").

3. BASE FLOOD ELEVATION (BFE) – The elevation floodwaters would reach at a particular site during the occurrence of a base flood event.

4. BASEMENT - Any enclosed area of a building which has its floor or lowest level below ground level (subgrade) on all sides. Also see "lowest floor."

5. DEVELOPMENT - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, drilling operations or storage of equipment or materials. "Development" does not include "minor projects" or "routine maintenance of existing buildings and facilities" as defined in this section. It also does not include gardening, plowing, and similar practices that do not involve filling or grading.

6. ENCLOSED AREA BELOW LOWEST FLOOR – The floor of the lowest enclosed area in a building when all the following criteria are met:

   A. The enclosed area is designed to flood to equalize hydrostatic pressure during flood events with walls or openings that satisfy the provisions of Section 85.07(2)(D)(1) of this Ordinance, and

   B. The enclosed area is unfinished (not carpeted, drywalled, etc.) and used solely for low damage potential uses such as building access, parking or storage, and

   C. Machinery and service facilities (e.g., hot water heater, furnace, electrical service) contained in the enclosed area are located at least one (1) foot above the base flood elevation, and

   D. The enclosed area is not a "basement" as defined in this section.

7. EXISTING CONSTRUCTION - Any structure for which the "start of construction" commenced before the effective date of the first floodplain management regulations adopted by the community.

8. EXISTING FACTORY-BUILT HOME PARK OR SUBDIVISION - A factory-built home park or subdivision for which the construction of facilities for servicing the lots on which the factory-built homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the first floodplain management regulations adopted by the community.

9. EXPANSION OF EXISTING FACTORY-BUILT HOME PARK OR SUBDIVISION - The preparation of additional sites by the construction of facilities for servicing the lots on which the factory-built homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

10. FACTORY-BUILT HOME - Any structure, designed for residential use which is wholly or in substantial part, made, fabricated, formed or assembled in manufacturing facilities for installation or assembly and installation, on a building site. For the purpose of this Ordinance factory-built homes include mobile homes, manufactured homes, and modular homes; and also include "recreational vehicles" which are placed on a site for greater than 180 consecutive days and not fully licensed for and ready for highway use.

11. FACTORY-BUILT HOME PARK OR SUBDIVISION - A parcel or contiguous parcels of land divided into two or more factory-built home lots for sale or lease.

12. FIVE HUNDRED (500) YEAR FLOOD – A flood, the magnitude of which has a two-tenths (0.2) percent chance of being equaled or exceeded in any given year or which, on average, will be equaled or exceeded at least once every five hundred (500) years.

13. FLOOD - A general and temporary condition of partial or complete inundation of normally dry land areas resulting from the overflow of streams or rivers or from the unusual and rapid runoff of surface waters from any source.

14. FLOOD INSURANCE RATE MAP (FIRM) - The official map prepared as part of (but published separately from) the Flood Insurance Study which delineates both the flood hazard areas and the risk premium zones applicable to the community.

15. FLOOD INSURANCE STUDY (FIS) – A report published by FEMA for a community issued along with the community's Flood Insurance Rate Map(s). The study contains such background data as the base flood discharge and water surface elevations that were used to prepare the FIRM.

16. FLOODPLAIN - Any land area susceptible to being inundated by water as a result of a flood.

17. FLOODPLAIN MANAGEMENT - An overall program of corrective and preventive measures for reducing flood damages and promoting the wise use of floodplains, including but not limited to emergency preparedness plans, flood control works, floodproofing and floodplain management regulations.

18. FLOODPROOFING - Any combination of structural and nonstructural additions, changes, or adjustments to structures, including utility and sanitary facilities, which will reduce or eliminate flood damage to such structures.

19. FLOODWAY - The channel of a river or stream and those portions of the floodplains adjoining the channel, which are reasonably required to carry and discharge flood waters or flood flows so that confinement of flood flows to the floodway area will not cumulatively increase the water surface elevation of the base flood by more than one (1) foot.

20. FLOODWAY FRINGE - Those portions of the Special Flood Hazard Area outside the floodway.

21. HIGHEST ADJACENT GRADE – The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

22. HISTORIC STRUCTURE - Any structure that is:

    A. Listed individually in the National Register of Historic Places, maintained by the Department of Interior, or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing of the National Register;

    B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

    C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or,

    D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by either i) an approved state program as determined by the Secretary of the Interior or ii) directly by the Secretary of the Interior in states without approved programs.

23. LOWEST FLOOR - The floor of the lowest enclosed area in a building including a basement except when the criteria listed in the definition of Enclosed Area below Lowest Floor are met.

24. MAXIMUM DAMAGE POTENTIAL DEVELOPMENT – Hospitals and like institutions; buildings or building complexes containing documents, data, or instruments of great public value; buildings or building complexes containing materials dangerous to the public or fuel storage facilities; power installations needed in emergency or other buildings or building complexes similar in nature or use.

25. MINOR PROJECTS - Small development activities (except for filling, grading and excavating) valued at less than $500.

26. NEW CONSTRUCTION - (new buildings, factory-built home parks) - Those structures or development for which the start of construction commenced on or after the effective date of the first floodplain management regulations adopted by the community.

27. NEW FACTORY-BUILT HOME PARK OR SUBDIVISION - A factory-built home park or subdivision for which the construction of facilities for servicing the lots on which the factory-built homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the effective date of the first floodplain management regulations adopted by the community.

28. RECREATIONAL VEHICLE - A vehicle which is:

    A. Built on a single chassis;
    B. Four hundred (400) square feet or less when measured at the largest horizontal projection;
    C. Designed to be self-propelled or permanently towable by a light duty truck; and
    D. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

29. ROUTINE MAINTENANCE OF EXISTING BUILDINGS AND FACILITIES – Repairs necessary to keep a structure in a safe and habitable condition that do not trigger a building permit, provided they are not associated with a general improvement of the structure or repair of a damaged structure. Such repairs include:

    A. Normal maintenance of structures such as re-roofing, replacing roofing tiles and replacing siding;
    B. Exterior and interior painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work;
    C. Basement sealing;
    D. Repairing or replacing damaged or broken window panes;
    E. Repairing plumbing systems, electrical systems, heating or air conditioning systems and repairing wells or septic systems.

30. SPECIAL FLOOD HAZARD AREA (SFHA) – The land within a community subject to the "base flood". This land is identified on the community's Flood Insurance Rate Map as Zone A, A1-30, AE, AH, AO, AR, and/or A99.

31. START OF CONSTRUCTION - Includes substantial improvement, and means the date the development permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement, was within 180 days of the permit date. The actual start means either the first placement or permanent construction of a structure on a site, such as pouring of a slab or footings, the installation of pile, the

construction of columns, or any work beyond the stage of excavation; or the placement of a factory-built home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

32. STRUCTURE - Anything constructed or erected on the ground or attached to the ground, including, but not limited to, buildings, factories, sheds, cabins, factory-built homes, storage tanks, grain storage facilities and/or other similar uses.

33. SUBSTANTIAL DAMAGE - Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred. Volunteer labor and donated materials shall be included in the estimated cost of repair.

34. SUBSTANTIAL IMPROVEMENT - Any improvement to a structure which satisfies either of the following criteria:

    A. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either (i) before the "start of construction" of the improvement , or (ii) if the structure has been "substantially damaged" and is being restored, before the damage occurred.

       The term does not, however, include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions. The term also does not include any alteration of an "historic structure", provided the alteration will not preclude the structure's designation as an "historic structure".

    B. Any addition which increases the original floor area of a building by 25 percent or more. All additions constructed after the effective date of the first floodplain management regulations adopted by the community shall be added to any proposed addition in determining whether the total increase in original floor space would exceed 25 percent.

35. VARIANCE - A grant of relief by a community from the terms of the floodplain management regulations.

36. VIOLATION - The failure of a structure or other development to be fully compliant with the community's floodplain management regulations.

85.02 STATUTORY AUTHORITY, FINDINGS OF FACT AND PURPOSE.

1. The Legislature of the State of Iowa has in Chapter 335, Code of Iowa, as amended, delegated the power to counties to enact zoning regulations to secure safety from flood and to promote health and the general welfare.

2. Findings of Fact

   A. The flood hazard areas of Emmet County are subject to periodic inundation which can result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base all of which adversely affect the public health, safety and general welfare of the community.

   B. These flood losses, hazards, and related adverse effects are caused by: (i) The occupancy of flood hazard areas by uses vulnerable to flood damages which create hazardous conditions as a result of being inadequately elevated or otherwise protected from flooding and (ii) the cumulative effect of obstructions on the floodplain causing increases in flood heights and velocities.

   C. This ordinance relies upon engineering methodology for analyzing flood hazards which is consistent with the standards established by the Department of Natural Resources.

3. Statement of Purpose

It is the purpose of this Ordinance to protect and preserve the rights, privileges and property of Emmet County and its residents and to preserve and improve the peace, safety, health, welfare, and comfort and convenience of its residents by minimizing those flood losses described in Section 85.02(2)(A) of this Ordinance with provisions designed to:

   A. Reserve sufficient floodplain area for the conveyance of flood flows so that flood heights and velocities will not be increased substantially.

   B. Restrict or prohibit uses which are dangerous to health, safety or property in times of flood or which cause excessive increases in flood heights or velocities.

   C. Require that uses vulnerable to floods, including public facilities which serve such uses, be protected against flood damage at the time of initial construction or substantial improvement.

   D. Protect individuals from buying lands which may not be suited for intended purposes because of flood hazard.

   E. Assure that eligibility is maintained for property owners in the community to purchase flood insurance through the National Flood Insurance Program.

85.03 GENERAL PROVISIONS.

1. Lands to Which Ordinance Apply

The provisions of this Ordinance shall apply to all lands within the jurisdiction of Emmet County shown on the Official Floodplain Zoning Map as being within the boundaries of the Floodway, Floodway Fringe, and General Floodplain (Overlay) Districts, as established in Section 85.05.

2. Establishment of Official Floodplain Zoning Map

The Flood Insurance Rate Map (FIRM) for Emmet County and Incorporated Areas, dated September 24, 2021, which was prepared as part of the Flood Insurance Study for Emmet County, is (are) hereby adopted by reference and declared to be the Official Floodplain Zoning Map. The Emmet County Flood Insurance Study is hereby adopted by reference and is made a part of this ordinance for the purpose of administering floodplain management regulations.

3. Rules for Interpretation of District Boundaries

The boundaries of the zoning district areas shall be determined by scaling distances on the Official Floodplain Zoning Map. When an interpretation is needed as to the exact location of a boundary, the Zoning Officer shall make the necessary interpretation. The Board of Adjustment shall hear and decide appeals when it is alleged that there is an error in any requirement, decision, or determination made by the Zoning Officer in the enforcement or administration of this Ordinance.

4. Compliance

No structure or land shall hereafter be used and no structure shall be located, extended, converted or structurally altered without full compliance with the terms of this Ordinance and other applicable regulations which apply to uses within the jurisdiction of this Ordinance.

5. Abrogation and Greater Restrictions

It is not intended by this Ordinance to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this Ordinance imposes greater restrictions, the provision of this Ordinance shall prevail. All other ordinances inconsistent with this Ordinance are hereby repealed to the extent of the inconsistency only.

6. Interpretation

In their interpretation and application, the provisions of this Ordinance shall be held to be minimum requirements and shall be liberally construed in favor of the governing body and shall not be deemed a limitation or repeal of any other powers granted by State statutes.

7. Warning and Disclaimer of Liability

The standards required by this Ordinance are considered reasonable for regulatory purposes. This Ordinance does not imply that areas outside the designated Floodplain (Overlay) District areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of Emmet County or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made there under.

8. Severability

If any section, clause, provision or portion of this Ordinance is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this Ordinance shall not be affected thereby.

85.04 ADMINISTRATION.

1. Appointment, Duties and Responsibilities of Local Official

   A. The Zoning Officer is hereby appointed to implement and administer the provisions of this Ordinance and will herein be referred to as the Administrator.

   B. Duties and responsibilities of the Administrator shall include, but not necessarily be limited to the following:

      1) Review all floodplain development permit applications to assure that the provisions of this Ordinance will be satisfied.

      2) Review floodplain development applications to assure that all necessary permits have been obtained from federal, state and local governmental agencies including approval when required from the Department of Natural Resources for floodplain construction.

      3) Record and maintain a record of:

         (i) the elevation (in relation to North American Vertical Datum 1988) of the lowest floor (including basement) of all new or substantially improved structures or
         (ii) the elevation to which new or substantially improved structures have been floodproofed.

      4) Notify adjacent communities/counties and the Department of Natural Resources prior to any proposed alteration or relocation of a watercourse and submit evidence of such notifications to the Federal Emergency Management Agency.

      5) Keep a record of all permits, appeals and such other transactions and correspondence pertaining to the administration of this Ordinance.

      6) Submit to the Federal Insurance Administrator an annual report concerning the community's participation, utilizing the annual report form supplied by the Federal Insurance Administrator.

7) Notify the Federal Insurance Administrator of any annexations or modifications to the community's boundaries.

8) Review subdivision proposals to ensure such proposals are consistent with the purpose of this ordinance and advise the Board of Adjustment of potential conflict.

9) Maintain the accuracy of the community's Flood Insurance Rate Maps when;

   a. Development placed within the Floodway (Overlay) District results in any of the following:

      (i) An increase in the Base Flood Elevations, or
      (ii) Alteration to the floodway boundary

   b. Development placed in Zones A, AE, AH, and A1-30 that does not include a designated floodway that will cause a rise of more than one foot in the base elevation; or

   c. Development relocates or alters the channel.

   Within 6 months of the completion of the development, the applicant shall submit to FEMA all scientific and technical data necessary for a Letter of Map Revision.

10) Perform site inspections to ensure compliance with the standards of this Ordinance.

11) Forward all requests for Variances to the Board of Adjustment for consideration. Ensure all requests include the information ordinarily submitted with applications as well as any additional information deemed necessary to the Board of Adjustment.

2. Floodplain Development Permit

A. Permit Required - A Floodplain Development Permit issued by the Administrator shall be secured prior to any floodplain development (any man-made change to improved and unimproved real estate, including but not limited to buildings or other structures, mining, filling, grading, paving, storage of materials and equipment, excavation or drilling operations), including the placement of factory-built homes.

B. Application for Permit - Application shall be made on forms furnished by the Administrator and shall include the following:

1) Description of the work to be covered by the permit for which application is to be made.

2) Description of the land on which the proposed work is to be done (i.e., lot, block, track, street address or similar description) that will readily identify and locate the work to be done.

3) Location and dimensions of all structures and additions

4) Indication of the use or occupancy for which the proposed work is intended.

5) Elevation of the base flood.

6) Elevation (in relation to North American Vertical Datum 1988) of the lowest floor (including basement) of structures or of the level to which a structure is to be floodproofed.

7) For structures being improved or rebuilt, the estimated cost of improvements and market value of the structure prior to the improvements.

8) Such other information as the Administrator deems reasonably necessary (e.g., drawings or a site plan) for the purpose of this Ordinance.

C. Action on Permit Application - The Administrator shall, within a reasonable time, make a determination as to whether the proposed floodplain development meets the applicable standards of this Ordinance and shall approve or disapprove the application. For disapprovals, the applicant shall be informed, in writing, of the specific reasons therefore. The Administrator shall not issue permits for variances except as directed by the County Board of Adjustment.

D. Construction and Use to be as Provided in Application and Plans - Floodplain Development Permits based on the basis of approved plans and applications authorize only the use, arrangement, and construction set forth in such approved plans and applications and no other use, arrangement or construction. Any use, arrangement, or construction at variance with that authorized shall be deemed a violation of this Ordinance. The applicant shall be required to submit certification by a professional engineer or land surveyor, as appropriate, registered in the State of Iowa, that the finished fill, structure floor elevations, floodproofing, or other flood protection measures were accomplished in compliance with the provisions of this Ordinance, prior to the use or occupancy of any structure.

85.05 ESTABLISHMENT OF ZONING (OVERLAY) DISTRICTS.

The floodplain areas within the jurisdiction of this ordinance are hereby divided into the following districts:

1. Floodway (Overlay) District (FW) – those areas identified as Floodway on the Official Flood Plain Zoning Map;

2. Floodway Fringe (Overlay) District (FF) – those areas identified as Zone AE on the Official Flood Plain Zoning Map but excluding those areas identified as Floodway, and;

3. General Floodplain (Overlay) District (GF) – those areas identified as Zone A on the Official Flood Plain Zoning Map.

The boundaries shall be as shown on the Official Floodplain Zoning Map. Within these districts, all uses not allowed as Permitted Uses are prohibited unless a variance to the terms of this ordinance is granted after due consideration by the Board of Adjustment.

85.06 FLOODWAY (OVERLAY) DISTRICT (FW).

1. Permitted Uses

All development within the Floodway District shall be permitted to the extent that they are not prohibited by any other ordinance (or underlying zoning district) and provided they meet applicable performance standards of the Floodway District.

2. Performance Standards

All Floodway District uses allowed as a Permitted Use shall meet the following standards.

A. No development shall be permitted in the Floodway District that would result in any increase in the base flood elevation. Consideration of the effects of any development on flood levels shall be based upon the assumption that an equal degree of development would be allowed for similarly situated lands.

B. All development within the Floodway District shall:

   1) Be consistent with the need to minimize flood damage.

   2) Use construction methods and practices that will minimize flood damage.

   3) Use construction materials and utility equipment that are resistant to flood damage.

C. No development shall affect the capacity or conveyance of the channel or floodway of any tributary to the main stream, drainage ditch or any other drainage facility or system.

D. Structures, buildings, recreational vehicles, and sanitary and utility systems, if permitted, shall meet the applicable performance standards of the Floodway Fringe District and shall be constructed or aligned to present the minimum possible resistance to flood flows.

E. Structures, if permitted, shall have a low flood damage potential and shall not be for human habitation.

F. Storage of materials or equipment that are buoyant, flammable, explosive or injurious to human, animal or plant life is prohibited. Storage of other material may be allowed if readily removable from the Floodway District within the time available after flood warning.

G. Watercourse alterations or relocations (channel changes and modifications) must be designed to maintain the flood carrying capacity within the altered or relocated portion. In

addition, such alterations or relocations must be approved by the Department of Natural Resources.

H. Any fill allowed in the floodway must be shown to have some beneficial purpose and shall be limited to the minimum amount necessary.

I. Pipeline river or stream crossings shall be buried in the streambed and banks or otherwise sufficiently protected to prevent rupture due to channel degradation and meandering or due to the action of flood flows.

85.07 FLOODWAY FRINGE (OVERLAY) DISTRICT FF.

1. Permitted Uses

All development within the Floodway Fringe District shall be permitted to the extent that they are not prohibited by any other ordinance (or underlying zoning district) and provided they meet applicable performance standards of the Floodway Fringe District.

2. Performance Standards

All development must be consistent with the need to minimize flood damage and meet the following applicable performance standards. Until a regulatory floodway is designated, no development may increase the Base Flood Elevation more than one (1) foot. The applicant will be responsible for providing the Department of Natural Resources with sufficient technical information to make such determination.

A. All development shall:

1) Be designed and adequately anchored to prevent flotation, collapse or lateral movement.

2) Use construction methods and practices that will minimize flood damage.

3) Use construction materials and utility equipment that are resistant to flood damage.

B. Residential structures - All new or substantially improved residential structures shall have the lowest floor, including basement, elevated a minimum of one (1) foot above the base flood elevation. Construction shall be upon compacted fill which shall, at all points, be no lower than 1.0 ft. above the base flood elevation and extend at such elevation at least 18 feet beyond the limits of any structure erected thereon. Alternate methods of elevating (such as piers or extended foundations) may be allowed where existing topography, street grades, or other factors preclude elevating by fill. In such cases, the methods used must be adequate to support the structure as well as withstand the various forces and hazards associated with flooding.

All new residential structures located in areas that would become isolated due to flooding of surrounding ground shall be provided with a means of access that will be passable by wheeled vehicles during the base flood. However, this criterion shall not apply where the Administrator determines there is sufficient flood warning time for the protection of life and property. When estimating flood warning time, consideration shall be given to the criteria listed in 567-75.2(3), Iowa Administrative Code.

C. Non-residential structures - All new or substantially improved non-residential structures shall have the lowest floor (including basement) elevated a minimum of one (1) foot above the base flood elevation, or together with attendant utility and sanitary systems, be floodproofed to such a level. When floodproofing is utilized, a professional engineer registered in the State of Iowa shall certify that the floodproofing methods used are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the base flood; and that the structure, below the base flood elevation is watertight with walls substantially impermeable to the passage of water. A record of the certification indicating the specific elevation (in relation to North American Vertical Datum 1988) to which any structures are floodproofed shall be maintained by the Administrator.

D. All new and substantially improved structures:

1) Fully enclosed areas below the "lowest floor" (not including basements) that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or meet or exceed the following minimum criteria:

a. A minimum of two (2) openings, with positioning on at least two (2) walls, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.

b. The bottom of all openings shall be no higher than one foot above grade.

c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

Such areas shall be used solely for parking of vehicles, building access and low damage potential storage. Where the distance between the floor and ceiling of the fully enclosed area below the “lowest floor” is five (5) feet or more, the applicant shall be required to sign and record with the Emmet County Recorder a Non-Conversion Agreement that ensures the lower enclosed area remains compliant with the criteria outlined in Section 85.07(2)(D)(1).)

2) New and substantially improved structures must be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

3) New and substantially improved structures shall be constructed with electric meter, electrical service panel box, hot water heater, heating, air conditioning, ventilation equipment (including ductwork), and other similar machinery and equipment elevated (or in the case on non-residential structures, optionally floodproofed to) a minimum of one (1) foot above the base flood elevation.

4) New and substantially improved structures shall be constructed with plumbing, gas lines, water/gas meters and other similar service utilities either elevated (or in the case of non-residential structures, optionally floodproofed to) a minimum of one (1) foot above the base flood elevation or designed to be watertight and withstand inundation to such a level.

E. Factory-built homes:

1) All new and substantially improved factory-built homes, including those placed in existing factory-built home parks or subdivisions, shall be elevated on a permanent foundation such that the lowest floor of the structure is a minimum of one (1) foot above the base flood elevation.

2) All new and substantially improved factory-built homes, including those placed in existing factory-built home parks or subdivisions, shall be anchored to resist flotation, collapse, or lateral movement. Anchorage systems may include, but are not limited to, use of over-the-top or frame ties to ground anchors as required by the State Building Code.

F. Utility and Sanitary Systems:

1) On-site wastewater disposal and water supply systems shall be located or designed to avoid impairment to the system or contamination from the system during flooding.

2) All new and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system as well as the discharge of effluent into flood waters. Wastewater treatment facilities (other than on-site systems) shall be provided with a level of flood protection equal to or greater than one (1) foot above the base flood elevation.

3) New or replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. Water supply treatment facilities (other than on-site systems) shall be provided with a level of protection equal to or greater than one (1) foot above the base flood elevation.

4) Utilities such as gas or electrical systems shall be located and constructed to minimize or eliminate flood damage to the system and the risk associated with such flood damaged or impaired systems.

G. Storage of materials and equipment that are flammable, explosive or injurious to human, animal or plant life is prohibited unless elevated a minimum of one (1) foot above the base flood elevation. Other material and equipment must either be similarly elevated or
(i) not be subject to major flood damage and be anchored to prevent movement due to flood waters or
(ii) be readily removable from the area within the time available after flood warning.

H. Flood control structural works such as levees, flood walls, etc. shall provide, at a minimum, protection from the base flood with a minimum of 3 ft. of design freeboard and shall provide for adequate interior drainage. In addition, the Department of Natural Resources shall approve structural flood control works.

I. Watercourse alterations or relocations must be designed to maintain the flood carrying capacity within the altered or relocated portion. In addition, the Department of Natural Resources must approve such alterations or relocations.

J. Subdivisions (including factory-built home parks and subdivisions) shall be consistent with the need to minimize flood damages and shall have adequate drainage provided to reduce exposure to flood damage. Development associated with subdivision proposals (including the installation of public utilities) shall meet the applicable performance standards of this Ordinance. Subdivision proposals intended for residential use shall provide all lots with a means of access which will be passable by wheeled vehicles during the base flood. Proposals for subdivisions greater than five (5) acres or fifty (50) lots (whichever is less) shall include base flood elevation data for those areas located within the Floodway Fringe (Overlay) District.

K. Accessory Structures to Residential Uses

1) Detached garages, sheds, and similar structures that are incidental to a residential use are exempt from the base flood elevation requirements where the following criteria are satisfied:

   a. The structure shall be designed to have low flood damage potential. Its size shall not exceed 600 sq. ft. in size. Those portions of the structure located less than 1 foot above the base flood elevation must be constructed of flood-resistant materials.

   b. The structure shall be used solely for low flood damage potential purposes such as vehicle parking and limited storage. The structure shall not be used for human habitation.

   c. The structure shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwaters.

   d. The structure shall be firmly anchored to prevent flotation, collapse, and lateral movement which may result in damage to other structures.

   e. The structure's service facilities such as electrical and heating equipment shall be elevated or floodproofed to at least one foot above the base flood elevation.

f. The structure's walls shall include openings that satisfy the provisions of Section 85.07(2)(D)(1) of this Ordinance.

2) Exemption from the base flood elevation requirements for such a structure may result in increased premium rates for flood insurance coverage of the structure and its contents.

L. Recreational Vehicles

1) Recreational vehicles are exempt from the requirements of Section 85.07(2)(E) of this Ordinance regarding anchoring and elevation of factory-built homes when the following criteria are satisfied:

a. The recreational vehicle shall be located on the site for less than 180 consecutive days, and,

b. The recreational vehicle must be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system and is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

2) Recreational vehicles that are located on the site for more than 180 consecutive days or are not ready for highway use must satisfy requirements of Section 85.07(2)(E) of this Ordinance regarding anchoring and elevation of factory-built homes.

M. Pipeline river and stream crossings shall be buried in the streambed and banks, or otherwise sufficiently protected to prevent rupture due to channel degradation and meandering.

N. Maximum Damage Potential Development – All new or substantially improved maximum damage potential development shall have the lowest floor (including basement) elevated a minimum of one (1) foot above the elevation of the 500-year flood, or together with attendant utility and sanitary systems, be floodproofed to such a level. When floodproofing is utilized, a professional engineer registered in the State of Iowa shall certify that the floodproofing methods used are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the 0.2% annual chance flood; and that the structure, below the 0.2% annual chance flood elevation is watertight with walls substantially impermeable to the passage of water. A record of the certification indicating the specific elevation (in relation to North American Vertical Datum 1988) to which any structures are floodproofed shall be maintained by the Administrator. Where 0.2% chance flood elevation data has not been provided in the Flood Insurance Study, the Iowa Department of Natural Resources shall be contacted to compute such data. The applicant will be responsible for providing the Department of Natural Resources with sufficient technical information to make such determinations.

85.08 GENERAL FLOODPLAIN (OVERLAY) DISTRICT (GF).

1. Permitted Uses

   A. All development within the General Floodplain District shall be permitted to the extent that they are not prohibited by any other ordinance (or underlying zoning district) and provided they meet the applicable performance standards of the General Floodplain District.

   B. Any development which involves placement of structures, factory-built homes, fill or other obstructions, storage of materials or equipment, excavation or alteration of a watercourse shall be reviewed by the Department of Natural Resources to determine (i) whether the land involved is either wholly or partly within the floodway or floodway fringe and (ii) the base flood elevation. The applicant shall be responsible for providing the Department of Natural Resources with sufficient technical information to make the determination.

   C. Review by the Iowa Department of Natural Resources is not required for the proposed construction of new or replacement bridges or culverts where:

      1) The bridge or culvert is located on a stream that drains less than one hundred (100) square miles, and

      2) The bridge or culvert is not associated with a channel modification that constitutes a channel change as specified in 567-71.2(1)b, Iowa Administrative Code.

2. Performance Standards

   A. All development, or portions thereof, to be located in the floodway as determined by the Department of Natural Resources shall meet the applicable provisions and standards of the Floodway (Overlay) District Section 85.06.

   B. All development, or portions thereof, to be located in the floodway fringe as determined by the Department of Natural Resources shall meet the applicable provisions and standards of the Floodway Fringe (Overlay) District Section 85.07.

85.09 Reserve for Future Use.

85.10 APPOINTMENT AND DUTIES OF BOARD OF ADJUSTMENT.

1. Appointment and Duties of Board of Adjustment - A Board of Adjustment is hereby established which shall hear and decide (i) appeals and (ii) requests for variances to the provisions of this ordinance, and shall take any other action which is required of the Board.

2. Appeals - Where it is alleged there is any error in any order, requirement, decision, or determination made by an administrative official in the enforcement of this ordinance, the

aggrieved party may appeal such action. The notice of appeal shall be filed with the Board of Adjustment and with the official from whom the appeal is taken and shall set forth the specific reason for the appeal. The official from whom the appeal is taken shall transmit to the Board of Adjustment all the documents constituting the record upon which the action appealed from was taken.

3. Variance - The Board of Adjustment may authorize upon request in specific cases such variances from the terms of this Ordinance that will not be contrary to the public interest where, owing to special conditions, a literal enforcement of the provisions of this Ordinance will result in unnecessary hardship. Variances granted must meet the following applicable standards.

   A. Variances shall only be granted upon: (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) a determination that the granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local codes or ordinances.

   B. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood would result. Consideration of the effects of any development on flood levels shall be based upon the assumption that an equal degree of development would be allowed for similarly situated lands.

   C. Variances shall only be granted upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

   D. In cases where the variance involves a lower level of flood protection for structures than what is ordinarily required by this Ordinance, the applicant shall be notified in writing over the signature of the Administrator that: (i) the issuance of a variance will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage and (ii) such construction increases risks to life and property.

   E. All variances granted shall have the concurrence or approval of the Department of Natural Resources.

4. Hearings and Decisions of the Board of Adjustment

   A. Hearings. Upon the filing with the Board of Adjustment of an Appeal or a request for a Variance, the Board shall hold a public hearing. The Board shall fix a reasonable time for the hearing and give public notice thereof, as well as due notice to parties in interest. At the hearing, any party may appear in person or by agent or attorney and present written or oral evidence. The Board may require the appellant or applicant to provide such information as is reasonably deemed necessary and may request the technical assistance and/or evaluation of a professional engineer or other expert person or agency, including the Department of Natural Resources.

B. Decisions. The Board shall arrive at a decision on an Appeal or Variance within a reasonable time. In passing upon an Appeal, the Board may, so long as such action is in conformity with the provisions of this ordinance, reverse or affirm, wholly or in part, or modify the order, requirement, decision, or determination appealed from, and it shall make its decision, in writing, setting forth the findings of fact and the reasons for its decision. In granting a Variance, the Board shall consider such factors as contained in this section and all other relevant sections of this ordinance and may prescribe such conditions as contained in Section 85.10(4)(B)(2).

1) Factors Upon Which the Decision of the Board of Adjustment Shall be Based. In passing upon applications for Variances, the Board shall consider all relevant factors specified in other sections of this Ordinance and:

a. The danger to life and property due to increased flood heights or velocities caused by encroachments.

b. The danger that materials may be swept on to other land or downstream to the injury of others.

c. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions.

d. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.

e. The importance of the services provided by the proposed facility to the County.

f. The requirements of the facility for a floodplain location.

g. The availability of alternative locations not subject to flooding for the proposed use.

h. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.

i. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.

j. The safety of access to the property in times of flood for ordinary and emergency vehicles.

k. The expected heights, velocity, duration, rate of rise and sediment transport of the flood water expected at the site.

l. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities (sewer, gas, electrical and water systems), facilities, streets and bridges.

m. Such other factors which are relevant to the purpose of this Ordinance.

2) Conditions Attached to Variances - Upon consideration of the factors listed above, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose of this Ordinance. Such conditions may include, but not necessarily be limited to:

a. Modification of waste disposal and water supply facilities.

b. Limitation of periods of use and operation.

c. Imposition of operational controls, sureties, and deed restrictions.

d. Requirements for construction of channel modifications, dikes, levees, and other protective measures, provided such are approved by the Department of Natural Resources and are deemed the only practical alternative to achieving the purpose of this Ordinance.

e. Floodproofing measures shall be designed consistent with the flood protection elevation for the particular area, flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, and other factors associated with the regulatory flood. The Board of Adjustment shall require that the applicant submit a plan or document certified by a registered professional engineer that the floodproofing measures are consistent with the regulatory flood protection elevation and associated flood factors for the particular area.

5. Appeals to the Court - Any person or persons, jointly or severally, aggrieved by any decision of the Board of Adjustment may present to a court of record a petition, duly verified, setting forth that such decision is illegal, in whole or in part, specifying the grounds of the illegality. Such petition shall be presented to the court within thirty days after the filing of the decision in the office of the Board.

85.11 NONCONFORMING USES.

1. A structure or the use of a structure or premises which was lawful before the passage or amendment of this Ordinance, but which is not in conformity with the provisions of this Ordinance, may be continued subject to the following conditions:

A. If such use is discontinued for six (6) consecutive months, any future use of the building premises shall conform to this Ordinance.

B. Uses or adjuncts thereof that are or become nuisances shall not be entitled to continue as nonconforming uses.

C. If any nonconforming use or structure is destroyed by any means, including flood, it shall not be reconstructed if the cost is more than fifty (50) percent of the market value of the structure before the damage occurred, unless it is reconstructed in conformity with the provisions of this Ordinance. This limitation does not include the cost of any alteration to comply with existing state or local health, sanitary, building or safety codes or regulations or the cost of any alteration of a structure listed on the National Register of Historic Places, provided that the alteration shall not preclude its continued designation.

2. Except as provided in Section 85.11(1)(B), any use which has been permitted as a Variance shall be considered a conforming use.

85.12 PENALTIES FOR VIOLATION.

Violations of the provisions of this Ordinance or failure to comply with any of the requirements (including violations of conditions and safeguards established in connection with grants of Variances) shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than $500.00 (five hundred dollars) or imprisoned for not more than 30 (thirty) days. Each day such violation continues shall be considered a separate offense. Nothing herein contained prevent Emmet County from taking such other lawful action as is necessary to prevent or remedy violation.

85.13 AMENDMENTS.

The regulations and standards set forth in this Ordinance may from time to time be amended, supplemented, changed, or repealed. No amendment, supplement, change, or modification shall be undertaken without prior approval of the Department of Natural Resources.

ADOPTED AND PASSED by the Board of Supervisors of the County of

_____ this _____ day of _____, 20___.

_____
Chairman

Seal of County

Attest:

_____
County Auditor

Public Hearing Date: _____

Publication Date: _____

Effective Date: _____

Note: All Ordinances must be properly certified.